United States Department of Agriculture



Federal Crop Insurance Corporation



Risk Management Agency



Product Administration and Standards Division

FCIC- 18140 (10-2008)

# VEGETATION INDEX

# INSURANCE STANDARDS HANDBOOK

2009 and Succeeding Crop Years

# (THIS PAGE INTENTIONALLY LEFT BLANK)

## UNITED STATES DEPARTMENT OF AGRICULTURE WASHINGTON, D.C. 20250

FEDERAL CROP INSURANCE HANDBOOK		NUMBER: 18140 (10-2008)	
SUBJECT:	OPI: Product Admini	istration and Standards Division	
VEGETATION INDEX INSURANCE STANDARDS HANDBOOK	APPROVED:	DATE:	
2009 AND SUCCEEDING CROP YEARS	/s/ Tim B. Witt	October 3, 2008	
	<b>Deputy Administrator, Product Management</b>		

THIS HANDBOOK CONTAINS THE OFFICIAL FCIC-APPROVED UNDERWRITING, ADMINISTRATION, AND LOSS ADJUSTMENT STANDARDS FOR THE VEGETATION INDEX CROPS, FOR THE 2009 AND SUCCEEDING CROP YEARS. ALL APPROVED INSURANCE PROVIDERS (AIPs) MUST UTILIZE THESE STANDARDS.

### **SUMMARY OF CHANGES**

The following list contains significant changes to this handbook, as determined by us. It may not represent all changes made. All changes made to this handbook are applicable regardless of whether or not listed.

Major Changes: See changes or additions in text which have been highlighted. Where entire Exhibits have been added, the title only is highlighted.

### Changes for crop year 2009 (FCIC-18140) issued October 2008:

- A. Page 25, Exhibit 4, "Determining Grid ID(s) and Use of the Website": Added Exhibit 4 to the handbook for greater visibility and ease of access, as the correct Grid ID selection is essential for insurance coverage.
- B. Page 36, Exhibit 5, "Vegetation Index Pasture, Rangeland, Forage Example": Added Exhibit 5 to the handbook for greater visibility and ease of access, as the correct Grid ID selection is essential for insurance coverage.
- C. Added references to Exhibits 4 and 5 throughout the handbook, as appropriate.

OCTOBER 2008 SC 1 FCIC-18140 (VI)

# RAINFALL INDEX INSURANCE STANDARDS HANDBOOK

### **SUMMARY OF CHANGES/CONTROL CHART (Continued)**

Control Chart For: Vegetation Index Insurance Standards Handbook						
	SC Page(s)	TC Page(s)	Text Page(s)	Reference Material	Date	Directive Number
Remove	ENTIRE HANDBOOK DATED 08-2008					
Current Index	1-2	1-2	1-18	19-57	10-2008	FCIC 18140

OCTOBER 2008 SC 2 FCIC-18140 (VI)

# VEGETATION INDEX INSURANCE STANDARDS HANDBOOK

### **TABLE OF CONTENTS**

	1. INTRODUCTION	1
	2. SPECIAL INSTRUCTIONS	1
Α.	DISTRIBUTION	2
В.	TERMS, ABBREVIATIONS, AND DEFINITIONS	
	3. INSURANCE CONTRACT INFORMATION	
Α	GENERAL INFORMATION	3
	ELIGIBILITY	
	INSURABILITY	
D.	COVERAGE AVAILABLE	6
E.	YIELD HISTORY AND PRODUCTION RECORDS	6
	ROUNDING RULES	
G.	PAYMENT CALCULATIONS	7
Н.	ADMINISTRATIVE FEE & PREMIUM DETERMINATION	
	4. UNDERWRITING	
	FORMS AND PROCEDURES	
	GENERAL APPLICATION REQUIREMENTS	
	APPLICATION FORM REQUIREMENTS	
D.	GENERAL ACREAGE REPORTING REQUIREMENTS	12
E.	ACREAGE REPORT FORM REQUIREMENTS	13
	ACREAGE REPORT REVIEW SELECTION	
	ACREAGE REPORT REVIEW CRITERIA	
H. I.	ACREAGE REPORT REVIEW SUMMARYSUMMARY OF COVERAGE REQUIREMENTS	
1.	5. INDEMNITY	
Α.	GENERAL INDEMNITY PAYMENT FORM REQUIREMENTS	15
В.	NOTICE OF INDEMNITY PAYMENT REQUIREMENTS	
	EXHIBIT 1: VI WORKSHEET	
	EXHIBIT 2: VEGETATION INDEX POLICY DISCLAIMER	23
	EXHIBIT 3: ACREAGE CERTIFICATION	
	EXHIBIT 4: DETERMINING GRID ID(S) AND USE OF THE WEBSITE	25
	EXHIBIT 5: PASTURE, RANGELAND, FORAGE VEGETATION INDEX EXAMPI	LE 36
	APPENDIX A: PASTURE RANGELAND FORAGE	
	APPENDIX B: APICULTURE	51
	APPENDIX C: FSA DECISIONS ON NAP AND OTHER PROGRAMS	56

(THIS PAGE INTENTIONALLY LEFT BLANK)

### 1. INTRODUCTION

This handbook identifies the crop-specific procedural requirements for servicing the Vegetation Index (VI) Plans of Insurance in a uniform and timely manner.

- A. The VI Plan of Insurance is designed as a risk management tool to insure against a decline in an index in a designated area called a grid, and it is primarily intended for use by those producers whose crop production tends to follow the average vegetation index patterns for the grid. It is possible for the insured to have low crop production on the acreage that is insured and still not receive a payment under this plan. Because the program is designed for those producers whose crop production tends to follow the average vegetation index patterns and not individual crop production, the insured should review the historical indices, additional tools, and information provided on the RMA Web site to determine if the program is suitable for their risk management needs.
- B. A VI policy provides coverage from a reduction in the index.
- C. This handbook and the applicable appendices, along with the VI Basic Provisions, applicable Crop Provisions and Special Provisions, provides needed information. Because of the broad scope of information covered by this handbook, references are made to other handbooks, procedures, or policies as appropriate.
- D. This handbook contains exhibits and appendices with additional information for the VI plan of insurance. The appendices contain crop specific information and standards and other information. The exhibits and appendices include:
  - (1) Exhibit 1: Vi Worksheet
  - (2) Exhibit 2: Vi Policy Disclaimer
  - (3) Exhibit 3: Acreage Certification
  - (4) Exhibit 4: Determining Grid Id(S) and Use of the Website
  - (5) Exhibit 5: Vegetation Index Pasture, Rangeland, Forage Example
  - (6) Appendix A: Pasture, Rangeland, Forage Specific Standards
  - (7) Appendix B: Apiculture specific standards
  - (8) Appendix C: FSA Decision on Nap

### 2. SPECIAL INSTRUCTIONS

This handbook remains in effect until superseded by re-issuance of either the entire handbook or selected portions (through slipsheets or bulletins). If slipsheets have been issued for a handbook, the original handbook as amended by slipsheet pages shall constitute the handbook. A bulletin can supersede either the original handbook or subsequent slipsheets.

OCTOBER 2008 1 FCIC-18140 (VI)

### A. <u>DISTRIBUTION</u>

The following is the minimum distribution of policy forms:

- (1) One legible copy to the insured.
- (2) The original and all remaining copies as instructed by the AIP.

It is the AIP's responsibility to maintain original insurance documents relative to policyholder servicing as designated in their approved plan of operations.

### B. TERMS, ABBREVIATIONS, AND DEFINITIONS

- (1) Terms, abbreviations, and definitions that are general (not crop specific) are identified in the CIH and LAM.
- (2) For ease in the administration of the terms of the VI-API policy and to avoid the duplication of documents, as used throughout the VI Basic Provisions and applicable handbooks and directives, the term "acre" is replaced by "colony;" "acres" and "acreage" are replaced by "colonies;" "acreage report" is replaced by "colony report;" and "acreage reporting date" is replaced by "colony reporting date" (i.e., Report of Acreage = Report of Colonies, acreage reporting date = colony reporting date, insured acres or acreage = insured colonies, etc.).
- (3) Terms, abbreviations, and definitions specific to VI policies and this handbook, which are not defined in the VI Basic Provisions, applicable Crop Provisions, or Special Provisions, are defined as they appear in the text.
- (4) Abbreviations:

**AIP** – Approved Insurance Provider

**APH** - Actual Production History

**API** – Apiculture

**CAT -** Catastrophic Risk Protection

**CIH** – Crop Insurance Handbook

**CP** – Crop Provisions

**DSSH** – Document Standards and Supplemental Handbook – FCIC Handbook 24040

**EROS** - Earth Resources Observation System

FCIC - Federal Crop Insurance Corporation - Loss Adjustment Manual

LAM - Loss Adjustment Manual

**MPCI** - Multiple Peril Crop Insurance

**NAP** – Noninsured Crop Disaster Assistance Program

NDVI - Normalized Difference Vegetation Index

NOAA - National Oceanographic and Atmospheric Administration

**PRF** – Pasture, Rangeland, Forage

RMA - Risk Management Agency SPOI - Special Provisions of Insurance SRA – Standard Reinsurance Agreement VI – Vegetation Index

For additional crop specific requirements, terms, conditions, and definitions, refer to the Appendices.

### 3. INSURANCE CONTRACT INFORMATION

### A. GENERAL INFORMATION

VI plan of insurance coverage is based on the experience of the grid rather than individual farms. It indemnifies the insured in the event the "final grid index" falls below the insured's "trigger grid index". Requirements are contained in the VI Basic Provisions, and the applicable Crop Provisions.

### B. ELIGIBILITY

A VI policy may be issued to a landlord and/or tenant, as well as an owner/operator, when the requirements of the VI Basic Provisions, Crop Provisions and Special Provisions and this handbook are met.

### C. <u>INSURABILITY</u>

The crops, types, and practices insured under this plan are those meeting the requirements of the VI Basic Provisions, and applicable Crop Provisions and Special Provisions. The AIP must determine that the insured has complied with all policy provisions of the insurance contract. VI policy provisions which are to be considered in this determination include but are not limited to:

- (1) Application The insured must submit to the AIP an application for each crop insured under the VI plan of insurance, in accordance with the DSSH, including the Privacy Act and Nondiscrimination Statement, no later than the sales closing date specified in the Special Provisions.
- (2) An acreage report must be filed annually with the AIP for each crop. The report must be on the AIP's form adhering to form standards contained in the DSSH and filed each year by the acreage reporting date specified in the Special Provisions.
- (3) VI policies are available ONLY in the states, counties, and grids listed in the county actuarial documents for the applicable crops.

- (4) VI policies are continuous contracts unless canceled in writing by either the insured or the AIP by the cancellation date. Insureds requesting cancellation of a VI policy and/or transfer to another AIP must do so in writing by the dates specified in the VI Basic Provisions and applicable Crop Provisions.
- (5) More than one VI policy offer (practice or type as listed for the crop in the actuarial documents for the county) may be available in a county for a crop. If more than one offer is available in a county, the insured must insure ALL of his/her acreage (unless specified in the applicable Crop Provisions) under the respective practice or type. However, if the applicant has two separate offers they can insure one offer under the VI policy and not the other offer, if allowed by the applicable Crop Provisions.

If the applicant chooses to insure the offer under the VI policy, they cannot insure the same crop, type, and practice (as applicable) under any other FCIC subsidized program (except as noted in section 3C(6)(b) of this handbook, the applicable Crop Provisions, or the applicable Special Provisions) or obtain payment under certain other programs administered by the USDA, such as, but not limited to the Conservation Reserve Program or NAP (except as provided in Appendix C). Refer to the VI Basic Provisions, applicable Crop Provisions and Special Provisions, and Appendix C for additional information.

If the acreage meets the requirements of different offers, the same acreage cannot be insured (during the same crop year) under the different offers. The insured must choose one offer under which to report and insure the acreage.

For additional crop specific requirements, refer to the Appendices.

- (6) VI coverage consists of the following requirements:
  - (a) Coverage is to be provided in accordance with the terms of the VI Basic Provisions, applicable Crop Provisions and Special Provisions.
  - (b) Unless otherwise specifically allowed by the applicable Crop Provisions or Special Provisions, an insured producer CANNOT insure the same crop, type, and practice in the same crop year through any other federally subsidized crop insurance program in counties where they carry VI coverage. However, VI policyholders may insure the same crop, type, and practice in the same county and crop year under an Adjusted Gross Revenue (AGR) or AGR-Lite policy. If more than one policy has been written that covers the insured's share of the crop, type, and practice, (except for AGR or AGR-Lite) the policy with the earliest application date will be in effect. All later policies will be void. Penalties may be applicable, as specified, in the provisions of 7 CFR Section 407.2.
  - (c) Review the applicable Crop Provisions, for verification of whether CAT coverage is available.

- (d) Protection is limited to the county base value per acre specified in the county actuarial documents for each crop, type, and practice (as applicable) multiplied by the maximum productivity factor, the maximum coverage level, and the insured share.
- (e) The insured may select **only one** coverage level and productivity factor for each insured crop, type, and practice combination as applicable in the Crop Provisions. The resulting dollar amount of protection per acre will be applied to each grid ID and the applicable crop, type, and practice.
- (f) The insured must report and certify, by the acreage reporting date, ALL insurable, and insured acres of the crop, type and practice in the county in which the insured has an interest, as specified in section 8 of the VI Basic Provisions, and applicable Crop Provisions.
  - The Acreage Certification can be completed by the insured on the acreage report in the remarks section, or by reviewing and signing Exhibit 3 of this handbook . The insured must certify in writing the requirements specified in section 8 of the VI Basic Provisions and applicable Crop Provisions.
- (g) For the VI, indemnity payments are calculated independently on a unit basis and do not offset any other unit results.
- (7) Acreage altered or removed as criteria for participation in any other government program is not insurable. A revised acreage report must be submitted removing the acreage, if such acreage was previously reported as insurable.
- (8) Acreage on which the insured has failed to follow good farming/ranching practices as defined in the VI Basic Provisions or applicable Crop Provisions for the insured crop will not be insured.
- (9) <u>ALL</u> applicants are required to sign a disclaimer form at the time of application. Refer to the disclaimer form in Exhibit 2 of this handbook.
- (10) The following coverage does NOT apply to VI coverage:
  - (a) Hail and fire exclusion provisions;
  - (b) High-risk land exclusion provisions;
  - (c) Late planting provisions;
  - (d) Replant requirements;
  - (e) Replanting payment provisions;
  - (f) Prevented planting provisions;
  - (g) Experience adjustment factors; or
  - (h) Optional units.

### D. COVERAGE AVAILABLE

- (1) VI coverage is expressed as a dollar amount of protection. The dollar amount of protection per acre will be the county base value per acre specified in the county actuarial documents for each crop, type, and practice (as applicable) multiplied by the coverage level and the productivity factor selected by the insured. The insured will have only one dollar amount of protection per acre for each county, crop, type, and practice as allowed by the applicable Crop Provisions.
- (2) The expected grid index multiplied by the selected coverage level (contained in the actuarial documents or VI Reports) equals the insured's "trigger grid index" (expected grid index *x* coverage level (%) = trigger grid index).
- (3) The expected grid index is established from the mean accumulated vegetation index, calculated using NDVI values by index interval corrected for temperature, normalized and expressed as a percentage, such that the mean is 100.
- (4) Premium rates are stated in dollars per one-hundred dollars of protection.
- (5) The VI worksheet (Exhibit 1) may be copied for use as a resource in explaining the VI plan of insurance.

### E. <u>YIELD HISTORY AND PRODUCTION RECORDS</u>

- (1) Yield history and production records are not utilized in determining guarantees, losses, premiums, or indemnities. However, yield history and production records may be required for selected crops insured under the VI plan of insurance. Refer to the applicable Crop Provisions and appendices contained in this handbook.
- (2) For policies that do not require yield history and production records, insureds are encouraged to maintain any individual crop production and acreage history for use, or possible future use, in a plan of insurance that uses APH yields for the same crop, e.g., APH Forage Production.
- (3) If a VI insured returns to a different plan of insurance that uses APH yields for the same crop, types, and practices, their APH yield history database will be updated ONLY if continuous crop production records are available. APH procedures will apply and can be referenced in the CIH.

### F. ROUNDING RULES

- (1) Acres to value:
  - a. PRF to tenths (XX.X); and
  - b. API colonies to whole numbers (XX);
- (2) Share and factors to thousandths (X.XXX);

- (3) Dollars to dollars and cents (X.XX);
- (4) Index Values to tenths (XXX.X); and
- (5) Payment calculation factor to thousandths (X.XXX).

### G. PAYMENT CALCULATIONS

- (1) As previously detailed in 3 D (3), the expected grid index is 100.
- (2) The final grid index for each grid is determined by FCIC based on current NDVI values corrected for temperature for each grid during the crop year, expressed as a percentage. As noted in the VI Basic Provisions, the insured may receive an indemnity payment if the final grid index falls below the insured's trigger grid index. The payment is equal to the payment calculation factor multiplied by the policy protection per unit, as specified in the Crop Provisions. Refer to the applicable Crop Provisions or Exhibit 5 of this handbook for a detailed example of payment calculations.

The only insurable cause of loss is when the final grid index is less than the trigger grid index. However, reduction in the final grid index due to a cause other than a natural occurrence will result in a final grid index in an amount based on the reduction due to natural occurrences only. Losses due to fire or other causes will be determined in the following manner:

- a) If the cause is determined by FCIC to be a natural disaster, and the final grid index value is less than the trigger grid index, the insured in the effected grid may receive indemnity payments as outlined in the policy; however,
- b) If the cause is determined by FCIC to be an act of man or intentional, a method of assigning the Vegetation index value from the nearest unaffected grid will be utilized to establish a final grid index value for the grid (s) affected.
- (3) Any unpaid amounts due the AIP, arising from a VI policy, or any other policy authorized under the Act, may be deducted from any indemnity payments due to the insured. Refer to the applicable Special Provisions for the appropriate billing dates.

### H. <u>ADMINISTRATIVE FEE & PREMIUM DETERMINATION</u>

- (1) In addition to the premium charged:
  - (a) For catastrophic or additional coverage, as applicable, you must pay an administrative fee for each crop year for each crop in the amount specified in the Special Provisions.

OCTOBER 2008 7 FCIC-18140 (VI)

(b) The administrative fee must be paid as specified in the VI Basic Provisions.

Administrative fees may be waived for limited resource farmers.

- (2) The annual premium is determined by applying the premium rate for each applicable county, grid ID, crop, type, practice, and coverage level selected based on the applicable Crop Provisions, Special Provisions or actuarial documents, including any actuarial data reporting tools available on the RMA web site. Premium = (dollar amount of protection per acre x premium rate x number of acres x 0.01 x share), for each unit. Total policy premium will equal the sum of all the premiums calculated for each unit. Refer to the applicable Crop Provisions for a detailed example of premium calculations. The premium cannot be less than zero.
- (3) The AIP will bill the insured for the total premium and administration fees, less the applicable subsidy. Premium and administrative fees shall be due and payable 30 days after the billing date specified in the applicable Special Provisions.
- (4) The insured may change the selected coverage level or productivity factor for subsequent years and notify the AIP in writing by the sales closing date for the applicable crop year.

### 4. UNDERWRITING

Policy documents for the VI plan of insurance contract consist of the following:

- Application;
- VI Basic Provisions;
- Applicable Crop Provisions; and
- Applicable Special Provisions.

### A. FORMS AND PROCEDURES

The following forms are used to administer the VI plan of insurance and must adhere to the standards contained in the DSSH, unless otherwise specified in this handbook, including additional information requirements.

- (1) **Special Report:** For required or additional information;
- (2) **Application:** Refer to B and C of this section;
- (3) Contract Changes Form;

- (4) **Disclaimer:** Refer to the VI Policy Disclaimer, Exhibit 2 of this handbook;
- (5) **Policy Confirmation**;
- (6) **Acreage Report:** Refer to D and E of this section for acreage report requirements, and F, G, and H of this section for review requirements;
- (7) **Summary of Coverage:** Refer to I of this section;
- (8) **Assignment of Indemnity:** Refer to the DSSH and CIH;
- (9) **Transfer of Right to an Indemnity:** Refer to the DSSH and CIH;
- (10) Applicable Actuarial Documents (including any actuarial data reporting tools available on the RMA web site) and Special Provisions: The actuarial documents, including actuarial data reporting tools and Special Provisions contain county actuarial data that includes the following specific information: expected grid(s) index; county base value; types, practices, index intervals; coverage levels/trigger grid index; unsubsidized rates; and subsidy rates;
- (11) **Power of Attorney:** Refer to the DSSH and CIH;
- (12) **Notice of Indemnity Payment:** Refer to Section 5 for indemnity payment form requirements and notice of indemnity payment requirements;
- (13) **Acreage Certification:** Refer to the Acreage Certification, Exhibit 3 of this handbook; and
- (14) **VI Worksheet:** Refer to Exhibit 1 of this handbook for the worksheet and instructions.

### B. GENERAL APPLICATION REQUIREMENTS

(1) **Sales Closing Dates:** Listed in the applicable Crop Provisions and Special Provisions.

Insured producers switching insurance coverage from another FCIC plan to a VI policy must provide a written cancellation for the other policy by the other crop's cancellation date. A new application for insurance must be signed by the VI policy sales closing date. If the other policy for the same crop that will be insured under a VI policy is not canceled, the other coverage will remain in effect and the VI policy coverage will be void. Refer to the VI Basic Provisions, applicable Crop Provisions, and CIH for additional information.

(2) **Late-Filed Applications:** Accepted ONLY when there is documented evidence that the RMA Web site was unavailable on the sales closing date and the insured was unable to properly identify their grid, grid ID, or other requirements, as

applicable. Coverage will attach, provided they signed an application and provided a report of their acreage with all available information as specified under section 8 of the VI Basic Provisions by the sales closing date. Upon the availability of the RMA Web site, the insured must select their grid ID, or other requirements as applicable and provide their completed report of acreage confirming all their insurable and insured acres, as outlined under section 8 of the VI Basis Provisions and the Report of Acreage section of the Crop Provisions, within 2 business days after the Web site becomes available.

- (3) **Levels of Coverage:** 65 (CAT coverage, if available) 70, 75, 80, 85, or 90 percent. For VI policies, the insured may select any percentage of coverage shown on the applicable actuarial documents, including any actuarial data reporting tools available on the RMA web site for each crop, type, and practice. Refer to the applicable Crop Provisions, Special Provisions and VI Basic Provisions.
- (4) **Eligible Counties:** Listed in the applicable Special Provisions. Multiple counties may be insured. County for the VI plan of insurance, as defined in the VI Basic Provisions, is also defined to include any acreage of the crop, type, and practice contained within a grid ID that crosses an adjoining county line where the acreage is contiguous. Refer to the VI Basic Provisions or applicable Crop Provision for the full definition.

For additional API requirements, refer to Appendix B.

- (5) **Eligible Grids:** Listed in the actuarial documents. Multiple county grids may be insured. The applicant will determine a point of reference identifying the insured acres and the corresponding grid ID by the sales closing date for all insured acres. Points of reference must be determined using the maps contained on RMA's Web site. Refer to Exhibits 4 and 5 for detailed instructions on determining the correct Point of Reference and Grid ID(s).
  - (a) A separate point of reference must be established for each crop, type, and practice in a grid as specified in the Applicable Crop Provisions, as follows:
    - 1. In the case of contiguous insured acreage that cross grids or county lines, a point of reference must be selected as follows:
      - i) If the insured chooses to combine the contiguous acreages of the crop, type, and practice (as applicable) into one single grid ID or county, a single point of reference must be established for all of the contiguous acreage; or
      - ii) If the insured chooses to separate the contiguous acreage of the crop, type, and practice (as applicable) into separate grid IDs or counties, they must establish the single point of reference for

each grid ID or county. For example: If the contiguous acreage is located in four grids and they choose to insure the acreage in separate grids, the acreage can be separated into two, three, or four grids. If they select three grids, they must establish the points of reference, and report on the acreage report the grid ID, and the amount of insured acres located, or assigned as applicable, to each grid ID.

- (6) **Insurable acres:** Only VI insurable acres as specified in the applicable Crop Provisions, are insurable at the time of filing the acreage report. Insurable acres must be reported by county. Refer to the VI Basic Provisions, applicable Crop Provisions, and Special Provisions.
- (7) **Insured acres:** The VI insured acres must equal all of the insured's insurable acres, unless otherwise specified in the applicable Crop Provisions. The amount of insured acres in the county will not exceed 100 percent of the insured's insurable acres of the crop in the county.
  - (a) For each grid, the insured must report the following, as applicable:
    - 1. Insured acres;
    - 2. Share;
    - 3. Practice:
    - 4. Type; and
    - 5. Grid ID.
  - (b) The same acres cannot be insured in more than one grid ID or county (except as noted in section 3C(6)(b) of this handbook).
  - (c) The insured must certify on the acreage report, refer to Exhibit 3, Acreage Certification, of this handbook, that the:
    - 1. Point of reference used for each grid ID is identifying the insured acres covered under the VI Basic Provisions and applicable Crop Provisions subject to section 8(f) of VI Basic Provisions;
    - 2. Acreage assigned to each grid ID is accurate to the best of their knowledge, subject to section 8 of the VI Basic Provisions.
  - (d) The grid ID for all insured acres will be included on the summary of coverage.
  - (e) Acreage associated with a grid ID in a county will be subject to the applicable actuarial documents. The county name(s) or county code(s) and grid number(s) must be shown on the application.

For additional crop specific requirements, refer to the Appendices.

- (8) **Dollar Amount of Protection per Acre:** The county base value per acre specified in the actuarial documents for each crop, type, and practice (as applicable) is multiplied by the selected coverage level, and multiplied by the selected productivity factor (60% 150%). The applicant will have only one dollar amount of protection per acre for each county, crop, type, and practice, as specified in the applicable Crop Provisions.
- (9) **Policy Protection:** The maximum dollar amount the insured is eligible to receive, equal to the sum of all the insured's policy protection per unit.
- (10) A Mandatory Disclaimer and Acreage Certification Form: The agent and applicant must complete, sign, and date a disclaimer form and acreage certification when the VI insurance application is signed. Refer to Exhibit 2 and Exhibit 3 of this handbook.

### C. <u>APPLICATION FORM REQUIREMENTS</u>

In addition to the requirements found in the DSSH, the VI application must contain:

- (1) **Dollar Amount of Protection per Acre**;
- (2) **Grid ID**; and
- (3) **Practice:** Three-digit code shown on the applicable Special Provisions.

### D. GENERAL ACREAGE REPORTING REQUIREMENTS

- (1) AIPs must obtain an annual acreage report for each insured crop.
- (2) Acreage must be reported on forms meeting the standards contained in the DSSH. Any other crops insured under other FCIC plans of insurance must be reported separately.
- (3) Acreage report data must be timely and properly submitted by AIPs to FCIC as stated in the SRA.
- (4) Acreage reporting dates are stated in the applicable Special Provisions. If the acreage reporting date falls on a Saturday, Sunday, or legal holiday, the acreage reporting date will be extended to the next business day as provided in the VI Basic Provisions.
- (5) Late-filed acreage reports, initially received at the agent's office after the specified acreage reporting date will be accepted or rejected in accordance with section 8 of the VI Basic Provisions.

OCTOBER 2008 12 FCIC-18140 (VI)

- (6) Before the published acreage reporting date, corrected or revised acreage reports may be taken for any reason.
- (7) After the published acreage reporting date, a CORRECTED acreage report may be completed at the AIP's discretion and identified as "Corrected" if the correction affects the Summary of Coverage. Corrections are allowed only when there is an error, such as but not limited to: the information on the acreage report is clearly transposed (e.g., 87.0 written as 78.0).
- (8) After the published acreage reporting date, a REVISED acreage report must meet the criteria specified in section 8 of the VI Basic Provisions.
- (9) For a VI policy, it is the responsibility of the insured to report and certify the insurable and insured acres, as specified in the VI Basic Provisions, applicable Crop Provisions, and section 4 B (6) and (7) of this handbook.

For additional API requirements refer to Appendix B.

### E. ACREAGE REPORT FORM REQUIREMENTS

In addition to the requirements found in the DSSH, acreage reports must also contain:

- (1) **Insurable Acres**;
- (2) **Insured Acres**;
- (3) **Insured Share:** The insured's share expressed as a 3 place decimal. Differing VI insured shares, for the crop, type, and practice, as specified in the applicable Crop Provisions and Special Provisions, require separate acreage report line entries. ALL ACREAGE OF THE CROP WITH THE SAME SHARE, TYPE, GRID, AND PRACTICE, REGARDLESS OF NAME OF OTHER PERSON(S) SHARING IN THE CROP, CAN BE ENTERED ON A SINGLE LINE OF THE REPORT.

For the reporting of share of the spouse and dependent children refer to the VI Basic Provisions;

- (4) **Grid ID**;
- (5) **Practice:** A practice code as listed in the applicable Special Provisions for each line for all insured acres for which a practice is specified. Record as a three digit number; e.g., practice code "232";
- (6) **Unit Number:** Record as a five-digit number. There is no basic unit discount and optional units are not applicable; and

OCTOBER 2008 13 FCIC-18140 (VI)

(7) **Productivity Factor:** Record the percentage as a 2 place decimal format, e.g. 125% reported as 1.25.

AIPs may utilize unused columns of their acreage report form to accommodate required entries.

For additional crop specific requirements, refer to the Appendices.

### F. ACREAGE REPORT REVIEW SELECTION

AIPs must perform acreage report reviews **no later than 120-days after the acreage reporting date** for the crop, as listed in the Special Provisions, or after a reduction in acreage, as specified in section 8 of the VI Basic Provisions. Acreage report reviews are required for:

- (1) All policies of employees, representatives, adjusters, agents, etc., of either an AIP or the FCIC on which a claim has been paid in the last year;
- (2) All policies for which misrepresentation or concealment of material facts are suspected;
- (3) All policies for which a written application for acreage reduction was completed during the crop year; and
- (4) **Not less than** a three percent random sample of all VI policies with reported acreage. Where policies have been selected that have multiple VI crops, or other area wide plans, the reviewer may verify the acreage report information for the other crops. Such verifications will apply toward the required reviews for that company for those crops, even though such reviews were not random.

### G. ACREAGE REPORT REVIEW CRITERIA

Acreage report reviews verify:

- (1) Total insurable acres versus insured acres for each crop, type, and practice, as applicable in the county; and,
- (2) Insurable share in the crop;

Actual field inspections are required on all policies for which misrepresentation or concealment of material facts is suspected.

For additional crop specific requirements, refer to the Appendices.

### H. ACREAGE REPORT REVIEW SUMMARY

Thirty days prior to the end date of the last index interval for the crop year, as specified in the applicable Special Provisions, the AIP must submit a report (Type 57 record) of its completed VI acreage report reviews, for each crop. Policies are considered to be within tolerance if the premium and indemnity discrepancy is less than \$250. The report summary will identify all unit discrepancies discovered, if the policy tolerance is exceeded.

### I. SUMMARY OF COVERAGE REQUIREMENTS

In addition to the requirements found in the DSSH, the following will also be provided:

- (1) **Insurable Acres**;
- (2) **Insured Acres**;
- (3) **Insured's Share**;
- (4) **Grid ID**;
- (5) **Practice**;
- (6) Trigger Grid Index;
- (7) **Protection per Acre:** Gross (before share);
- (8) **Policy Protection per Unit:** Net (after share);
- (9) **Policy Protection:** Net (after share); and
- (10) **Premium:** Net (after share).

### 5. INDEMNITY

### A. GENERAL INDEMNITY PAYMENT FORM REQUIREMENTS

There are no field claim activities (e.g., loss adjustment) for VI policies. VI policies have the following general requirements:

(1) Indemnity payments must be paid according to the VI Basic Provisions and applicable Crop Provisions, using the final grid index (es) released by FCIC and the insured's trigger grid index.

OCTOBER 2008 15 FCIC-18140 (VI)

- (a) However, losses must be due to natural causes. If the cause is determined to be an act of man or intentional (such as, but not limited to fire), it will result in a final grid index in an amount based on the reduction due to natural occurrences. A method of assigning the Vegetation index value by FCIC from the nearest unaffected grid will be utilized to establish a final grid index value for the grid(s) affected. The following procedure will be utilized by FCIC to determine affected and the nearest unaffected grid:
  - 1. The action must be determined to be an act of man. If natural causes, follow indemnity payments and forms as outlined in the policy;
  - 2. The area affected in the grid has to be greater than 5,000 acres. If less than 5,000 acres, follow indemnity payments and forms as outlined in the policy;
  - 3. FCIC will estimate the affected area before the release of the final grid index in the following manner:
    - i. The boundary of the action will be described by a **minimum of four** longitude and latitude readings representing the maximum dimensions, by FCIC designated personnel. For Example, in case of fire this will include the upwind, downwind and width points of the burned area.
    - ii. These points can be determined using the aerial photographs on the geo-referenced teraserver web portal developed for the Vegetation Index insurance program to assign Grid ID's and determine Point of Reference.
    - 4. The longitude and latitude of the points, in decimal degrees, will be recorded.
    - 5. Upon submission of the points, a linear point-to-point scribed polygon will be computed which overlays the Vegetation Index grids and a list of "impacted" Grid ID's will be extracted.
    - 6. For each selected impacted grid, the program will search for the nearest Vegetation Grid ID not impacted by the action and will list those for each impacted Grid ID.
    - 7. Data from the alternative Grid ID will be utilized for the impacted Grid ID (s).
- (2) Indemnity payments shall be calculated separately for each unit, as defined in the applicable Crop Provisions.
- (3) AIPs must make any indemnity payments **not later than 60 days** after receiving the VI final grid index from FCIC for the grid id.

### B. NOTICE OF INDEMNITY PAYMENT REQUIREMENTS

The AIP will acknowledge each indemnity payment with a "notice of indemnity payment" for each indemnified insured unit. This notice must contain AT LEAST the following:

- (1) **Insured's Name and Address:** Insured's complete name and address as shown on the application;
- (2) AIP's Name;
- (3) **Agent/Agency Name:** Servicing agent's or agency's complete name, address, and phone number;
- (4) **Contract/Policy Number:** Insured's assigned policy number;
- (5) **Crop:** Crop name as listed in the county actuarial documents;
- (6) **Crop Year:** Appropriate four-digit year, such as "YYYY," as defined in the policy;
- (7) Insured's Share;
- (8) Coverage Level;
- (9) **Type**;
- (10) **Grid ID**;
- (11) **Practice**;
- (12) Unit Number;
- (13) **Dollar Amount of Protection per Acre**;
- (14) Final Grid Index;
- (15) **Trigger Grid Index**;
- (16) **Indemnity:** Total VI policy indemnity payment, in whole dollars, for the insured crop in the county, for each unit;
- (17) **Final Payment:** Final indemnity payment in whole dollars for all VI policy crops, by unit. This entry is to reflect any reduction for any amount due the company; and
- (18) **Check Number and Date:** Actual check number with date of issue; e.g., MM/DD/YYYY.

NOTES

OCTOBER 2008 18 FCIC-18140 (VI)

### FOR ILLUSTRATION PURPOSES ONLY

### **Exhibit 1: VI Worksheet**

1. Insured's N	lame:			2. Date: _	//	3. State:	(_		y:	(	_)
5. Crop Type:		6. Co	verage Level/T	rigger Ind	ex:	7.	Productivity 1	Factor:	%		
8. \$ Amt. of P	rot/Ac:	9. 1	nsurable acres	s in the Co	unty	10. Tota	ıl insurable co	lonies (United	States)		
11 Grid ID	12 Insured Acreage or	13 Share	14 (Practice) Index Interval	<u>15</u> Unit Number	16 % Insured Acres or	17 Insured Acres or Colonies/	18 Policy Protection/	19 Premium Rate/\$100	20 Premium/ Unit	21 Premium Subsidy/	Producer Pemium/
	Colonies	percentage	intervai		Colonies/ Unit percentage	Unit  acres or colonies	Unit dollars	dollars	dollars	Unit dollars	Unit dollars
			I								
			III								
			IV								
				<u>Total</u>							
			I								
			III								
			IV								
				<u>Total</u>							
			I								
			III								
			IV	Total			:::::::::::::::::::::::::::::::::::::::				
			I			<u> </u>					
			II								
			III								
			IV	Total							
County Totals	12a.					17a.	18a.		20a.	21a.	22a.

Prepared by: \_\_\_\_\_\_\_(Agent's Signature) Insured's Initials: \_\_\_\_\_\_

### **VI Worksheet Completion Procedures**

### A. GENERAL INFORMATION

- (1) The VI Worksheet is provided to assist the agent in determining the insured's policy protection and premium.
- (2) To assist the agent, a separate worksheet should be completed for each county, crop, and type insured, as applicable
- (3) For API policies, agents and insured will substitute "colonies" for "acres" as directed by the API Crop Provisions.

### B. WORKSHEET ENTRIES AND COMPLETION INFORMATION

### Verify or make the following entries:

### **Item**

### **No.** Information Required

- 1. **Insured's Name:** Enter the name of the insured that identifies the person (legal entity) to whom the policy is issued.
- 2. **Date:** Enter the date the form was completed (MM/DD/YYYY).
- 3. **State:** Enter the state in which insurance attaches and the corresponding 2-digit state code.
- 4. **County:** Enter the county in which insurance attaches and the corresponding 3-digit county code.

Note: The VI Worksheet is provided for acreage in one county. For multiple counties, use separate worksheets.

- 5. **Type:** Enter the type if there are different types available (refer to the applicable Crop Provisions) for the crop. If the insured elects to insure more than one type, a separate worksheet should be completed for each type.
- 6. **Coverage Level (or Trigger Grid Index):** Enter the selected coverage level [65 (CAT), 70, 75, 80, 85, or 90 percent] as specified in the applicable Crop Provisions. The level of coverage selected by the applicant will be applied to each unit (as defined by the applicable Crop Provisions).

The coverage level and the trigger grid index are the same value. [For example: 75% (coverage level) x 100 (expected grid index) = 75 (trigger grid index)].

- 7. **Productivity Factor:** Enter the selected productivity factor (a percentage value between 60 and 150 percent, selected in one percent increments).
- 8. **Dollar Amount of Protection per Acre:** As specified in the VI Basic Provisions:
  - Example: county base value x coverage level (#6) x productivity factor (#7) [\$20.00 x 90% x 120% = \$21.60].
- 9. **Insurable Acres**: Enter the amount of Insurable acres in the county for the type, as applicable.
- 10. **Total insurable colonies (United States):** FOR API POLICIES ONLY, enter the TOTAL number of colonies in which you have a share in the United States.
- 11. **Grid ID (s):** Enter the specific grid number(s) corresponding to the insured acres in the county.
- 12. **Insured Acres**: Enter the number of insured acreage for each grid ID. Total the column numbers in 12a.
- 13. **Share:** Enter the applicable share, as a percentage, as applicable.
- 14. **Practice (Index Interval):** FOR PRF AND API POLICIES ONLY, Enter the code(s) associated with each practice (Index Interval).
- 15. **Unit Number:** Assign a unit number for each crop, type, practice and share, as applicable for each grid ID.
- 16. **Percentage of Insured Acres per Unit (by Practice):** FOR PRF AND API POLICIES ONLY, The insured may designate a percentage of the insured acres to more than one practice, as specified in the applicable Special Provisions. The sum of all the percentages (entered in the cell labeled "Total" and colored red) for each grid ID, and share must equal 100%.
- 17. **Amount of Insured Acres per Unit (by Practice)**: FOR PRF AND API POLICIES ONLY, for each practice (index interval), Column 16 *x* Column 12 for the corresponding rows and item.
  - The total insured acres for each grid ID (entered in the cell labeled "Total": and colored red) should equal the number in 12 for each grid. Also, total the column numbers in 17a, should equal the value in 12a.
- 18. **Policy Protection per Unit:** FOR PRF AND API POLICIES ONLY, the result of Item #8 *x* Column 17 *x* Column 13, for the corresponding row items.
  - **The Policy Protection** record in 18a the sum of column 18.

- 19. **Premium Rate/ \$100 of Insurance:** Enter the premium rate for each grid ID, type, and practice, as applicable.
- 20. **Premium per Unit:** Column 17 *x* Column 19 *x* 0.01 (adjustment factor) *x* Column 13, for each corresponding row item.
  - **Total Policy Premium** record in 20a the sum of column 20.
- 21. **Premium Subsidy per Unit**: Column 20 *x* the applicable subsidy percentage.
  - **Total Premium Subsidy** record in 21a the sum of column 21.
- 22. **Producer Premium per Unit**: Column 20 minus Column 21, for each corresponding row item.
  - **Total Producer Premium** record in 22a the sum of column 22.

OCTOBER 2008 22 FCIC-18140 (VI)

### **Exhibit 2: Vegetation Index Policy Disclaimer**

### YOU NEED TO UNDERSTAND THE FOLLOWING:

- THE VEGETATION INDEX IS NOT A PLAN OF INSURANCE AGAINST INDIVIDUAL LOSS. THE TERMS AND CONDITIONS OF THIS PLAN ARE DIFFERENT FROM THOSE OF AN ACTUAL PRODUCTION HISTORY PLAN OF MULTIPLE PERIL CROP INSURANCE.
- FINAL PAYMENT WILL BE MADE ACCORDING TO THE APPLICABLE CROP PROVISIONS. PREMIUM WILL BE DUE 30 DAYS AFTER THE BILLING DATE SPECIFIED IN THE ACTUARIAL DOCUMENTS.
- THIS PLAN OF INSURANCE IS DESIGNED AS A RISK MANAGEMENT TOOL TO INSURE AGAINST A DECLINE IN AN INDEX FOR A DESIGNATED AREA CALLED A GRID, AND IT IS PRIMARILY INTENDED FOR USE BY THOSE PRODUCERS WHOSE CROP PRODUCTION AND VEGETATION INDEX TENDS TO FOLLOW THE AVERAGE VEGETATION INDEX PATTERNS FOR THE GRID. IT IS POSSIBLE FOR YOU TO HAVE LOW CROP PRODUCTION OR LOW NDVI VALUES ON THE ACREAGE THAT YOU INSURE AND STILL NOT RECEIVE A PAYMENT UNDER THIS PLAN. THIS PROGRAM IS BASED UPON GRID INDICES, NOT INDIVIDUAL FARM YIELDS. THE ONLY INSURABLE CAUSE OF LOSS UNDER THIS POLICY IS HAVING A FINAL GRID INDEX LESS THAN YOUR TRIGGER GRID INDEX. BECAUSE THE PROGRAM IS DESIGNED FOR THE PRODUCERS WHOSE CROP PRODUCTION AND VEGETATION INDEX TENDS TO FOLLOW THE AVERAGE VEGETATION INDEX PATTERNS FOR THE GRID AND NOT INDIVIDUAL CROP PRODUCTION, YOU SHOULD REVIEW THE HISTORICAL INDICES, ADDITIONAL TOOLS, AND INFORMATION PROVIDED ON THE RMA WEB SITE TO DETERMINE IF THE PROGRAM IS SUITABLE FOR YOUR RISK MANAGEMENT NEEDS.
- YOU SHOULD CONTINUE TO MAINTAIN ANY AND ALL OF YOUR PRODUCTION RECORDS IN THE EVENT YOU WISH TO PURCHASE AN ACTUAL PRODUCTION HISTORY PLAN OF MULTIPLE PERIL CROP INSURANCE IN FUTURE YEARS.

I understand the terms of the Common Vegetation Index Policy Basic Provisions and applicable Crop Provisions. I am aware that I cannot obtain another plan of insurance in a county, if available, on crops insured under the VI plan of insurance with the exception of AGR and AGR Lite (if available), or in accordance with the Special Provisions. I am aware of the additional tools provided by RMA on their Web site related to the VI plans of insurance to assist me in determining if the VI plan of insurance is suitable for my farming operation. I have read and fully understand this Vegetation Index Disclaimer.

INSURED	AGENT
DATE	DATE

OCTOBER 2008 23 FCIC-18140 (VI)

### **Exhibit 3: Acreage Certification**

### **PRF** Producer Certification

### I (INSURED) CERTIFY:

- The point of reference used for each grid ID is identifying my insured acres covered under the VI Basic Provisions and the applicable Crop Provisions; and
- That the acreage assigned to each grid ID is accurate to the best of my knowledge.

INSURED	AGENT
DATE	DATE

### **API Producer Certification**

### I (INSURED) CERTIFY:

- The point of reference used for each grid ID is identifying the locations of my insured colonies covered under these Crop Provisions;
- That colonies assigned to each grid ID is accurate to the best of my knowledge;
- That the colonies qualify as apiculture; and
- The selected practices support the vegetation production necessary for the insured crop.

INSURED	AGENT
DATE	DATE

OCTOBER 2008 24 FCIC-18140 (VI)

### Exhibit 4: Determining Grid ID(s) and Use of the Website

### Introduction

As stated in the Vegetation Index Common Policy provisions and applicable crop provisions, a Grid ID is a specific code associated with each grid, contained in the actuarial documents. A Grid ID is determined based on a point of reference selected by you, which must be established by the sales closing date. Because a grid is approximately 4.8 miles (8km) by 4.8 miles in size, RMA has provided a web-based tool accessible on RMA's website, <a href="http://www.rma.usda.gov/">http://www.rma.usda.gov/</a> or a successor website, as a method to accurately identify the applicable Grid ID(s) for the insured's acreage. This Website is the official Website which will be used for any compliance related issues or final determinations that may be required.

The tool has been developed as an interactive website that a user can navigate through to various screens to collect information and establish a Grid ID. The tool will also allow a provider/agent to print any of the screens that appear on the site. It is recommended that when an insured selects a point of reference from the website, a printed copy (select the print option on the pages) of the screen with the map and corresponding point of reference (which contains state, county, grid, longitude, latitude, and other information related to location), should be placed in the file, for verification purposes. Additional details on these and other tools are provided in this Exhibit.

Because of the broad scope of information covered by this handbook, the information provided in this Exhibit provides additional clarification and requirements specific to the VI plan of insurance. The information provided in this Exhibit does not affect the construction or meaning of any of the policy provisions.

### **Locating the Website**

Locating and using the website can be completed at any location that has web access. The speed of the display on each screen is determined by each individual computer's speed and the internet connection capabilities. The tools available for the Vegetation Index are located at the Rainfall/Vegetation gateway page, <a href="http://www.rma.usda.gov/policies/ri-vi">http://www.rma.usda.gov/policies/ri-vi</a>, or a successor website.

### **Navigating the Website**

The first and one of the most important steps is to accurately identify the Grid ID(s). A direct link to RMA's web-based tool is available on the specific crop page under the Rainfall/Vegetation Indices gateway page. The web address for the VI-PRF tool is <a href="http://prfvi-rma-map.tamu.edu">http://prfvi-rma-map.tamu.edu</a>. This link brings you to the default page for the map driven Grid ID locator for the Vegetation Index pilot programs for Pasture, Rangeland, Forage. The Apiculture Vegetation Index map driven Grid ID locator tool can be found at <a href="http://api-vi-rma.tamu.edu/map">http://api-vi-rma.tamu.edu/map</a>

The following information provides additional details based on the design of the PRF websites. There are differences in the views between the PRF and API websites; however, the basic principles and steps remain the same.

An example of a default PRF screen is displayed, which is the default topo map:

### 12 mi N of Woodward, Harper County, Oklahoma, United States Latitude=36.6066, Longitude=-99.3195, NDVI 8km Grid ID = 121378. Set Layer to Topo Map Type in nearest town Map Size: Small Medium Large Extra Large Link to this location Click FIND View site list Click site to view Navigate to property Switch layer to Photo To navigate, click on map or use N/S/E/ W Navigate to point To zoom In/Out, click resolution button or City: Fargo, OK Resolution Possible matches. Click to vie 1. Farqo, Oklahoma 07ft O 13 ft 027 ft 054 ft 121377 ⊙ 108 ft O215 ft O430 ft I aver: 1971 Topo V 0860 ft View data at this locati O1720 ft Lookup Grid ID Using Lat/Lon Decision Support Tool View Historical Vegetation To print the map, click the print button below 2/20 21952 Michigrave View Rates/Values Print Map 121953 RMA Premium Calculator tower Other Links Return to RMA This website is a product of RMA, GMS, and CNRIT. Powered by TerraServer. Image courtesy of the U.S. Geological Survey.

### Map Driven Weather Grid Id Locator for Pasture, Rangeland, Forage Vegetation Index Insurance Program

Figure 1. Establish Reference Point and Grid ID Default Page, Topo Map

### **Description of the PRF Screen**

The middle of the screen displays the topo map (Figure 1). The map size can be changed by clicking on the "Small", "Medium", "Large", or "Extra Large" link located directly above the map. For purposes of these directions, a small map is displayed.

Within the map, the red '+' represents the current location and the point where information is collected. Above the map, the state and county of the red '+' is listed. In addition, the latitude and longitude coordinates and the Vegetation Grid ID's are provided.

The goal is to position the red '+' over the location of the insured's acreage, also known as the point of reference. As defined in the policy, a point of reference is: - "A method of identifying and documenting the location of the insured acreage and the associated grid ID, as provided on the acreage report, and covered under these Basic Provisions".

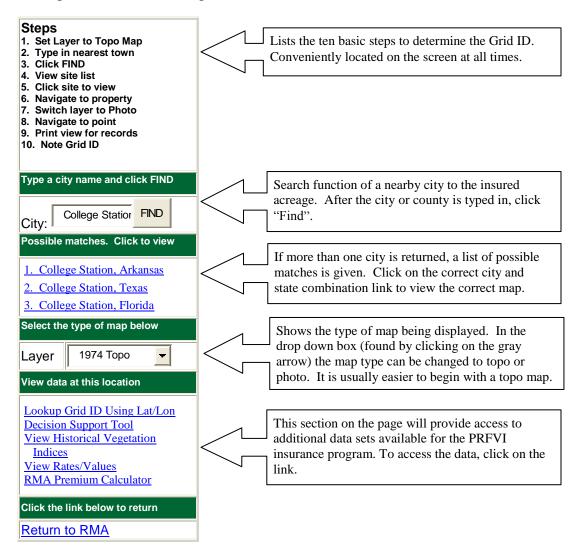
The red '+' can be moved by either clicking on the map or by clicking on the *N*, *S*, *E*, or *W* arrow buttons located around the perimeter of the map. To the right of the map, the resolution of the map can be increased or decreased. By increasing the resolution, or clicking on a smaller number, the map will zoom to a more exact location. Decreasing the resolution will expand the map, including a larger area.

Directly overlaying the map, square grids, outlined by a blue line, give an approximate visual representation of where the Grid IDs are located. For instance, on the default map shown, the red '+' is located just inside of Grid ID #121378. The Grid ID where the red '+' is located can be confirmed by looking above the map where the Vegetation Index Grid ID is listed.

The map can be printed at any time by clicking the "Print Map" icon located on the screens. It is recommended that a map be printed with each point of reference on an insured policy for verification purposes.

### **PRF Menu Options**

Along the left side of the screen, there is a list of menu options similar to those illustrated below. The options and their descriptions are as follows:



### The Photo Map (Laver)

As previously mentioned, there are two map types available to assist the applicant in locating their property. The first type, the topo map, was previously displayed. The second type, the photo map, displays details that can help the applicant identify landmarks on their property. As

OCTOBER 2008 27 FCIC-18140 (VI)

with the topo map, the grid boundaries are identified with a blue line and the Grid ID's are identified on the map in yellow. The point of reference is shown with a yellow '+'. Again the map can be resized to assist in the viewing and the locations of the gridlines. Grid lines are displayed on the API maps; however the grid information is displayed on the screen and not the map.

### 12 mi N of Woodward, Harper County, Oklahoma, United States Latitude=36.6066, Longitude=-99.3195, NDVI 8km Grid ID = 121378. Set Layer to Topo Map Type in nearest town Map Size: Small Medium Large Extra Large Click FIND View site list Click site to view Navigate to property Switch layer to Photo To navigate, click on map or use N/S/E/ W Navigate to point Print view for records Note Grid ID To zoom In/Out, click Type a city name and click FIND FIND City: Fargo, OK Resolution Possible matches. Click to view 03ft 1. Fargo, Oklahoma 07ft ⊙ 13 ft 027 ft 054 ft O 108 ft O215 ft Layer: 1995 Photo 🗸 O430 ft View data at this location 0860 ft Lookup Grid ID Using Lat/Lon ○1720 ft Decision Support Tool View Historical Vegetation Indices To print the map, click the print button below View Rates/Values Print Map RMA Premium Calculator Other Links Return to RMA This website is a product of RMA, GMS, and CNRIT. Powered by TerraServer. Image courtesy of the U.S. Geological Survey.

### Map Driven Weather Grid Id Locator for Pasture, Rangeland, Forage Vegetation Index Insurance Program

Figure 2. Photo Map Example

### **Locating the Insured's Acreage – Basic Steps**

This section lists the Basic Steps of how to find the location of insured's acreage by using the program's website. These steps will help to determine if the acreage is contained in a single grid or crosses over into more than one grid. An individual applicant may have more than one acreage location and will need to go through the steps for each location. A Grid ID must be selected for each location that is insured. This information will assist the insured in determining how many Grid IDs will be needed.

- Step 1 Type in the city and/or county name where the property is located (if no response is provided for the selected city, select a larger city near the property).
- Step 2 Select the city or county from the possible matches available on the display. By clicking on the link, a topo map for the area will be displayed.

- Step 3 Narrow the search by selecting an area close to where the property to be insured is actually located. The area can be narrowed by either clicking on the map or clicking on the *N*, *S*, *E*, or *W* arrows located around the perimeters of the screen. The area can be refined even further by increasing the resolution of the map.
- Step 4 It is recommended that once the applicant has located the general area where the property is located, that they continue to refine the search by switching to the photo maps.
- Step 5 Using the topo map, photo map, or combination of both, the applicant needs to navigate around the maps and choose an appropriate size of view that allows for proper identification of the property boundaries and the corresponding Grid ID(s).

If an insured wishes to determine the location of acreage and Grid ID(s) by utilizing Latitude and Longitude, click on the link under **Vegetation Index** which reads **Grid ID Locator** - **Longitude/Latitude Lookup.** Once the link is selected follow the on-screen options. It is important to point out that the Latitude and Longitude must be recorded in the format specified to accurately determine the Point of Reference. Latitude and Longitude must be selected for each location that is insured.

### **Determining the Grid ID(s) – Specific Guidelines**

By using the steps previously outlined, the applicant should be able to locate their acreage and corresponding Grid IDs on the map. This section discusses the specific guidelines in selecting appropriate Grid ID(s).

When selecting a Grid ID, several options are available to the applicant, depending on their circumstances and the location of their acreage. Therefore, go to the section that best represents the property or the mixture of properties. The table below is a quick reference on the insured's grid options and gives information on which section to refer to below for additional information.

Type of Acreage	<b>Grid Information</b>	Guideline	See Section
Contiguous Acreage	Single Grid	Choose one point of reference	A (1) Contiguous Acreage – One Grid
Contiguous Acreage	Multiple Grids – Combined	Choose one point of reference	A (2) Contiguous Acreage – Multiple Grids (Combined)
Contiguous Acreage	Multiple Grids – Separated	Choose one point of reference for each Grid ID selected or assigned as applicable	A (3) Contiguous Acreage – Multiple Grids (Separated)
Non-Contiguous Acreage (multiple properties)		Choose one point of reference for each, separate, non-contiguous acreage in the county.	B Non-Contiguous Acreage

It is also important to note that the same acres cannot be insured in more than one Grid ID or county and the amount of insured acreage will not exceed 100 percent of the insurable acreage of the crop in the county.

OCTOBER 2008 29 FCIC-18140 (VI)

### A. Determining the Grid ID(s) for Contiguous Acreage

Contiguous Acreage is defined as: - "Acreage of an insured crop owned by you, or rented by you for cash or crop share, in a county or grid that continues into an adjoining state, county or grid without interruption. Acreage separated by only a public or private right-of-way, waterway, or an irrigation canal will be considered contiguous."

Contiguous acreage may all be contained in one Grid ID or may spread into more than one Grid ID and/or county. If the acreage crosses into more than one grid and/or county, all contiguous acreage of the crop type may be combined into a single Grid ID using one point of reference for all of the acreage, including acreage that extends into an adjoining numbered grid or county Or, the insured may chose to separate the insured acreage into separately numbered Grid IDs where the acreage is located.

### (1) Contiguous Acreage – One Grid

If the insured's acreage is contiguous and located entirely within one state, grid and county, use the five Basic Steps previously listed to locate the insured's acreage and conduct the following steps:

- Step 6 The insured must then pick **one** point of reference on the property by moving the red (or yellow, depending on the type of map being viewed) '+' to that location. The Vegetation Index Grid ID listed at the top of the screen (and on the map itself) will be the Grid ID used in the policy.
- Step 7 Click on the Print Icon on the screen and print the map. This map will be used as a record to verify the Grid ID. Once printed the property boundary can also be outlined and initialed by the insured for verification purposes.
- Step 8 The insured must certify that the point of reference used for each grid ID is identifying the insured acres covered under the VI Basic Provisions and the applicable Crop Provisions.

For example, as shown in Figure 3, the Insured's Acreage is contiguous and located entirely in Grid 1. Therefore, the point of reference is chosen on the property and Grid 1 will be the only Grid ID used in the policy.

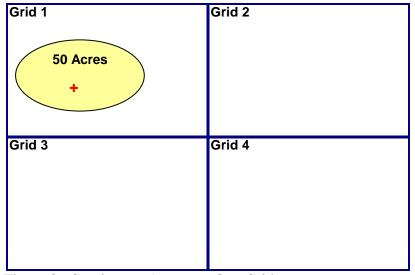


Figure 3. Contiguous Acreage - One Grid

### (2) Contiguous Acreage – Multiple Grids (Combined)

If the insured's acreage is contiguous and crosses into more than one grid and/or county, the insured has the option to **combine** the grids and/or counties and choose **one** reference point for the entire contiguous acreage. Use the five Basic Steps listed above to find the insured's acreage and add the following steps:

- Step 6 The insured must then pick **one** point of reference in the contiguous acreage by moving the red + to that location. The Vegetation Grid ID listed at the top of the screen (and in yellow on the map itself) will be the Grid ID used in the policy.
- Step 7 Click on the Print Icon on the screen and print the map. This map will be used as a record to verify the Grid ID. Once printed the property boundary can also be outlined and initialed by the insured for verification purposes.
- Step 8 The insured must certify that the point of reference used for each grid ID is identifying the insured acres covered under the VI Basic Provisions and the applicable Crop Provisions.

For example, in Figure 4 below, the insured's acreage is located in Grid 1 and Grid 2. The insured chose to combine the acreage; therefore, they will choose one point of reference for all of their acreage in both Grid 1 and Grid 2. In this example, the point of reference is in Grid 1, therefore Grid 1 will be the only Grid ID used in the policy.

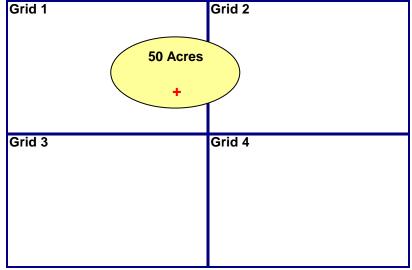


Figure 4. Contiguous Acreage - Multiple Grids (Combined)

## (3) Contiguous Acreage – Multiple Grids (Separated)

If the insured's acreage is contiguous and crosses into more than one grid and/or county, the insured can choose a point of reference for each grid and/or county and separate the acreage by Grid ID and/or county. If the insured chooses to separate the acreage into separate numbered Grid IDs, one point of reference will be selected in each Grid ID. Each Grid ID would be insured as a separate unit. If acreage is separated into a different county, a new policy for an additional county must be written.

Use the five Basic Steps previously listed to locate the insured's acreage and add the following steps:

- Step 6 The insured must then pick **one** point of reference in each Grid by moving the red '+' to that location. The Vegetation Grid ID listed at the top of the screen (and in yellow on the map itself) will be the Grid ID used in the policy.
- Step 7 Click on the Print Icon on the screen and print the map. This map will be used as a record to verify the Grid ID. Once printed the property boundary can also be outlined and initialed by the insured for verification purposes.
- Step 8 The insured must certify that the point of reference used for each grid ID is identifying the insured acres covered under the VI Basic Provisions and the applicable Crop Provisions.
- Step 9 The insured must certify that the acreage assigned to each grid ID is accurate to the best of their knowledge.

Steps 6 through 9 must be repeated for each grid that will be insured separately. If acreage is separated into a different county, a new policy for an additional county must be written.

For example, in Figure 5, the insured's acreage is located in Grid 1 and Grid 2. The insured chose to separate the acreage by Grid ID; therefore, choosing a point of reference in Grid 1 and a point of reference in Grid 2. In this example, the insured would certify and assign that there is approximately 35 acres in Grid 1 and 15 acres in Grid 2.

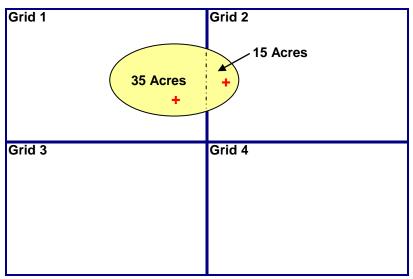


Figure 5. Contiguous Acreage - Multiple Grids (Separated)

### B. Determining the Grid ID(s) for Non-Contiguous Acreage

A point of reference must be selected for each separate, non-contiguous insured acreage of the crop that is located in the county. The steps in determining the point of reference are similar to the steps outlined for contiguous acreage, depending on whether or not the acreage crosses grid and/or county lines, and is repeated for each non-contiguous acreage area to be insured.

For example, in Figure 6, the insured has two separate acreage locations in two grids. The insured would have to pick a point of reference in Grid 1 and a point of reference in Grid 4 and insure the two properties separately.

OCTOBER 2008 33 FCIC-18140 (VI)

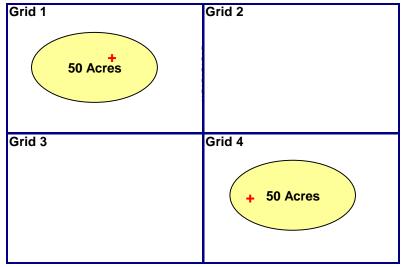


Figure 6. Non-contiguous Acreage Located in Separate Grids

In Figure 7, the insured has two separate acreage locations in three grids. First, the insured would have to select a point of reference in Grid 4. Similar to the contiguous acreage guidelines, the insured then has the option of combining the acreage in Grid 1 and Grid 2, or insuring them separately by grid. Therefore, depending on the insured, there may be 2 or 3 Grid ID's in this scenario.

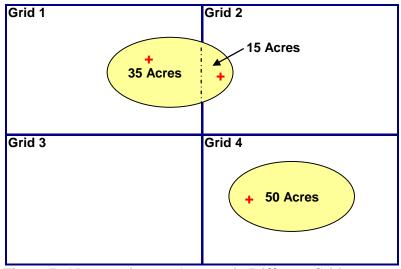


Figure 7. Non-contiguous Acreage in Different Grids

As illustrated in Figure 8, if the non-contiguous acreage is located in the same grid, the non-contiguous acreage will be combined and given a single Grid ID; however as the policy states the insured acreage must be documented (Point of Reference - A method of identifying and documenting the location of the insured acreage and the associated grid ID, as provided on the acreage report, and covered under these Basic Provisions.

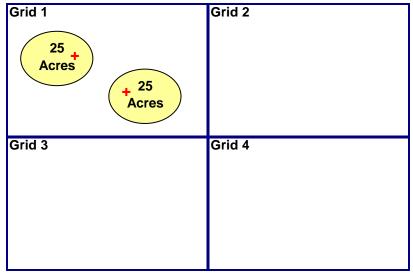


Figure 8. Non-contiguous Acreage in the Same Grid

### Other Links on the Website

In addition to the link described above, there are additional links on the Pasture, Rangeland, Forage and Apiculture web pages that are useful to the applicant. When these additional links are selected the insured will be able to view other options and data related to the VI-PRF and VI-API Pilot Programs. Once a link is selected, follow the on line options to view the information desired.

#### Introduction

The first half of this example walks a producer, Joe Rancher, through the basic information needed at the time of sign up/application. The second half of this example illustrates how the indemnity will be calculated at the time of loss. The same steps are applicable to the Apiculture Vegetation Index program. The below steps are also followed for Apiculture with the producer selecting the acreage upon which colonies will be located.

## At the time of application

## **Acreage and Grid Information**

Joe Rancher has 645 acres of grazingland and hayland in two counties in Colorado. His acreage is contained in five non-contiguous properties: A, B, C, D, and E.

A = grazingland (100% share)

B = grazingland (100% share)

C = grazingland and hayland (50% share)

D = grazingland (100% share)

E = grazingland (100% share)

Using the website, Joe Rancher locates his property and the corresponding grids (For information on locating the grids and using the website, see Exhibit 4 of this handbook). His properties are illustrated below in Figure 9.

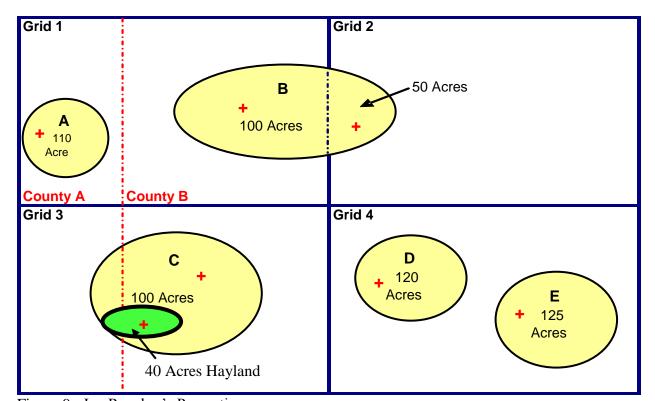


Figure 9. Joe Rancher's Properties

Joe Rancher decides to insure the four properties (535 insurable acres) located in County B (named Archuleta County in this example) and leave property A, uninsured in County A. Had he chosen to insure Property A in County A, he would have had to insure that acreage separately because Property A is non-contiguous from his other properties and located in a different county.

For his properties in County B, he has a couple of options in dividing his property among the four Grid IDs.

# Property B - Contiguous acreage spread into more than one grid (grazingland with 100% share)

Since the insurable acreage spreads into Grid 1 and Grid 2, all contiguous acreage of the crop type may be combined into a single Grid ID using one point of reference for all of the acreage. Or, Joe Rancher may choose to separate the insured acreage into separate numbered Grid IDs in which the acreage is located.

#### **Decision:**

Joe Rancher decides to separate the property into two Grid IDs; with 100 insured acres in Grid 1 and 50 insured acres in Grid 2. He picks a reference point in each Grid ID, certifies the point of reference is identifying the insured acreage in the grid, and certifies the approximate amount of insured acreage in each grid.

# Property C – Contiguous acreage spread into more than one county, which contains two crop types (both grazingland and hayland with 50% share)

Since the insurable acreage spreads into County A and County B, all contiguous acreage of the crop type may be combined into a single county (and Grid ID) using one point of reference for all of the acreage. Or, Joe Rancher may choose to separate the insured acreage by county in which the acreage is located. Of the 140 insurable acres in this property 100 acres is grazingland and 40 acres is hayland.

#### **Decision:**

Joe Rancher decides to pick a point of reference in County B and use that point of reference to represent all the contiguous insurable grazingland acreage (100 acres) in both County A and County B. He certifies the point of reference is identigying the insured acreage in the grid.

If Joe Rancher decides to insure his hayland acres (40 acres) he would follow the same steps for hayland, by selecting a point of reference in Grid 3 and depending on the point of reference the hayland would be insured in either County A or County B. Joe Rancher would also need to make all the decisions needed to complete the worksheet for his hayland acres.

# Property D and E - Non-Contiguous acreage located in a single grid (both grazingland with 100% share)

Since properties D and E are both located in Grid ID 4, the acreage is combined and insured as a single unit, even though they are non-contiguous acres and a point of reference identifies both insured acreage.

OCTOBER 2008 37 FCIC-18140 (VI)

#### **Decision:**

Joe Rancher identifies Properties D and E and insures all 245 acres under Grid ID 4. He picks a reference point and certifies that it is identifying the insured acreage in the grid.

# To recap, the following are the Grid IDs, the properties located in each, and acreage insured for grazingland:

Grid ID	Property	Insured Acreage
Grid 1 (insert the actual Grid ID number for the insured, i.e. 377881)	В	100
Grid 2 (insert the actual Grid ID number for the insured, i.e. 377882)	В	50
Grid 3 (insert the actual Grid ID number for the insured, i.e. 388773)	С	100
Grid 4 (insert the actual Grid ID number for the insured, i.e. 388774)	D&E	245
Total	495	

#### **Protection**

#### **Coverage Level**

Joe Rancher chooses a coverage level of 85%. He is required to insure each Grid ID in the county at the same coverage level.

## **Productivity Factor**

Joe Rancher chooses a productivity factor of 120 percent. The productivity factor is defined as: "A percentage factor selected by you that allows you to individualize your coverage based on the productivity of the crops you produce, and that ranges from 60 through 150 percent (selections can be made in one percent increments)". Only one productivity factor may be selected per county and crop type.

#### **County Base Value**

By looking at the Pasture, Rangeland, Forage Vegetation reports (rates and subsidies), Joe Rancher sees that the county base value per acre for grazingland is \$17.65 (For more information on premiums, rates, and subsidies contact your agent).

#### **Dollar Amount of Protection per Acre**

The Dollar Amount of Protection per acre is the result of multiplying the County Base value, times the coverage level selected, times the productivity factor percentage selected. Joe Rancher's Dollar Amount of Protection per Acre is calculated as follows:

\$ Amt of Protection per Acre = county base value x coverage level selected x productivity factor selected

= \$17.65 x.85 x 1.20 = \$18.00 per Acre

# Percent of Insured Acreage per Index Interval and Number of Insured Acres per Index Interval

Joe Rancher may designate a specific percentage of the insured acreage to more than one index interval for each Grid ID, or he may put all of the insured acreage into one index interval.

Joe Rancher and his agent look up the Special Provisions of Insurance for Colorado. In Archuleta County (used only as an example), he finds that if he places insured acreage in more than one index interval, he must place a minimum of 10% of his insured acreage in that index interval chosen. He also learns that the sum of all the insured acres per index interval must equal 100% of the total number of insured acres for each Grid ID, crop type, and share.

Joe Rancher chooses the following percent of insured acreage per index interval in which he can now calculate the number of acres per index interval (also listed in the table is the unit number based on his decisions):

Grid ID	Index Interval	Unit Number	% Protection	Number of acres
Grid 1	I	00100	100%	100 ac
	II			
Insured acreage = 100	III			
	IV			
	Total		100%	100 ac
Grid 2	I	00100	10%	5 ac
	II	00200	50%	25 ac
Insured acreage = 50	III			
	IV	00300	40%	20ac
	Total		100%	50 ac
Grid 3	I	00100	50%	50 ac
100	II			
Insured acreage = 100	III			
	IV	00200	50%	50 ac
	Total		100%	100 ac
Grid 4	I	00100	50%	122.5 ac
T 245	II	00200	30%	73.5 ac
Insured acreage = 245	III	00300	20%	49 ac
	IV			
	Total		100%	245 ac

OCTOBER 2008 39 FCIC-18140 (VI)

## **Policy Protection per unit**

To figure out the policy protection per unit, Joe Rancher must multiply the Dollar Amount of Protection per Acre, which was already calculated as \$18.00, times the number of insured acres per unit (crop type, Grid ID, index interval, and share), times his applicable share. The table below shows the result of that calculation.

Grid ID	Index Interval	Unit Number	Policy Protection/Unit
Grid 1	I (\$18.00 X 100ac X 1.0)	00100	\$1,800
- "	II		
Insured acreage = 100 100% share	III		
100 /6 Share	IV		
Cwid 2	I (\$18.00 X 5ac X 1.0)	00100	\$90
Grid 2	II (\$18.00 X 25ac X 1.0)	00200	\$450
Insured acreage = 50 100% share	III		
100 76 Share	IV (\$18.00 X 20ac X 1.0)	00300	\$360
G 112	I (\$18.00 X 50ac X 0.50)	00100	\$450
Grid 3	II		
Insured acreage = 100 50% share	III		
50% share	IV (\$18.00 X 50ac X 0.50)	00200	\$450
Grid 4	I (\$18.00 X 122.5ac X 1.0)	00100	\$2,205
	II (\$18.00 X 73.5ac X 1.0)	00200	\$1,323
Insured acreage = 245 100% share	III (\$18.00 X 49ac X 1.0)	00300	\$882
100 % Share	IV		
	<b>Policy Protection</b>		\$8,010

## **Policy Protection**

The Policy Protection is the sum of the policy protection per unit(s), and in this example equals \$8,010.

#### **Premium Rate**

Joe Rancher and his agent look up the applicable premium rate using the premium rate tables provided in the actuarial documents or the Pasture, Rangeland, Forage Vegetation reports (rates and subsidies). The table below shows the premium rate for each Grid ID and index interval (the rates and information used in the example are for illustration purposes and are not actual rates for Archuleta County).

OCTOBER 2008 40 FCIC-18140 (VI)

Grid ID	id ID Index Interval Unit Number		Rate/\$100	
Grid 1	I	00100	\$12.00	
	II			
	III			
	IV			
Grid 2	I	00100	\$13.50	
	II	00200	\$13.00	
	III			
	IV	00300	\$12.00	
Grid 3	I	00100	\$13.00	
	II			
	III			
	IV	00200	\$12.00	
Grid 4	I	00100	\$13.00	
	II	00200	\$14.00	
	III	00300	\$15.00	
	IV		·	

## **Premium/Unit (Index interval)**

For each index interval, Joe Rancher will need to determine the Premium/unit using the following formula:

Premium/unit (Index interval) = \$\\$ amount of protection/acre

x number of insured acres/unit

*x* premium rate

x adjustment factor of 0.01

x share

For example, in Grid 1, his Premium for Index Interval I would be calculated as follows:

Total Premium by Grid 1, Index Interval I =\$18.00 (\$ amt of protection per unit)

x 100 insured acres

x 12.00 (premium rate)

*x* 0.01 (adjustment factor)

*x* 1.0 (share)

= \$216.00

Using the formula, Joe Rancher determines the Premium/unit (Index Interval) for each grid (premium rounded to the nearest whole dollar).

Grid ID	Insured Acreage & Share	Index Interval	Unit Number	Policy Protection/ unit	Premium Rate/\$100	Premium
	100ac	Ι	00100	$($18.00 \times 100 \text{ ac } \times 1.0 \text{ share}) = $1,800$	\$12.00	\$216
Grid		II				
1	100% share	III				
	•	IV				
		Total		\$1,800.00		\$216
		I	00100	\$90.00	\$13.50	\$12
C1	50ac	II	00200	\$450.00	\$13.00	\$59
Grid		III				
2 100% share	100% share	IV	00300	\$360.00	\$12.00	\$43
		Total		\$900.00		\$114
	100	I	00100	\$450.00	\$13.00	\$59
Cartal	100ac	II				
Grid 3	50%	III				
3	share	IV	00200	\$450.00	\$12.00	\$54
	share	Total		\$900.00		\$113
		I	00100	\$2,205.00	\$13.00	\$287
Grid 4	245ac	II	00200	\$1,323.00	\$14.00	\$185
		III	00300	\$882.00	\$15.00	\$132
4	100% share	IV				
		Total		\$4,410.00		\$604
Gra	nd Totals			\$8,010		\$1,047

The sum of all the premiums per unit equals the Total Policy Premium for grazingland in Archuleta County (rates and name are only used for example purposes. They are not the actual rates), which in this example equals \$1,047.

### **Premium Subsidy**

To find the applicable subsidy percentage, Joe Rancher and his agent refer to the subsidy tables provided in the Pasture, Rangeland, Forage Vegetation reports (rates and subsidies) or actuarial document. For the coverage level of 85%, the applicable subsidy percentage is 55%.

The Premium Subsidy per Unit is the result of the total Premium per unit multiplied by the applicable Subsidy Percentage. Therefore Joe Rancher's Premium Subsidy per unit is calculated as follows:

Premium subsidy per unit = Premium per unit x subsidy rate

Example = 
$$$216 \times 0.55$$
  
=  $$119$ 

### **Premium due from Grower**

The Premium due from Grower for each unit (index interval) is the result of the Premium per unit minus the Premium Subsidy Amount per unit. Therefore Joe Rancher's Producer Premium per unit is calculated as follows:

Producer premium per unit = Premium per unit - Premium subsidy per unit

Using the above formulas Joe Rancher and his agent calculates the Premium Subsidy per Unit and the producer premium per unit. They sum these columns to determine the Total subsidy amount and the Total Producer Premium. The table below provides a summary of these calculations.

Grid ID	Index Interval	Unit Number	Premiums	Premium Subsidy	Producer Premium
	I	00100	\$216	\$119	\$97
Grid 1	II				
Gria 1	III				
	IV				
	I	00100	\$12	\$7	\$5
C: 3 2	II	00200	\$59	\$32	\$27
Grid 2	III				
	IV	00300	\$43	\$24	\$19
	I	00100	\$59	\$32	\$27
C-4.1.2	II				
Grid 3	III				
	IV	00200	\$54	\$30	\$24
	I	00100	\$287	\$158	\$129
Cwid 4	II	00200	\$185	\$102	\$83
Grid 4	III	00300	\$132	\$73	\$59
	IV				
Totals			\$1,047	\$576	\$471

OCTOBER 2008 43 FCIC-18140 (VI)

## **Vegetation Index Worksheet**

Joe Rancher and his agent can view all of these calculation and a summary of this information for the county by utilizing the VI Worksheet and accompanying instructions contained in Exhibit 1 of this handbook. This will allow them to see everything organized into one document.

### At the Time of Loss

At the end of the insurance period, the FCIC issues a Final Grid Index for Joe Rancher's insured grids. As determined above, his Trigger Grid Index is 85 for all grids and index intervals. The following table illustrates the Final Grid Index for each grid and index interval and whether the Final Grid Index is above or below the Trigger Grid Index.

Grid ID	Index Interval	Unit Number	Final Grid Index	Above or Below Trigger
	I	00100	120	Above
Grid 1	II			
Griu i	III			
	IV			
	I	00100	110	Above
Grid 2	II	00200	90	Above
Griu 2	III			
	IV	00300	70	Below
	I	00100	110	Above
Grid 3	II			
Griu 3	III			
	IV	00200	60	Below
	I	00100	120	Above
Grid 4	II	00200	70	Below
Griu 4	III	00300	60	Below
	IV		·	

## **Calculating Indemnities**

A payment is only made if the Final Grid Index for the insured unit is less than the Trigger Grid Index, regardless of the individual's actual precipitation in that index interval.

Payment calculation factor = (Trigger Grid Index – Final Grid Index)

Trigger Grid Index

**Indemnity payment** = Payment calculation factor

x Policy protection per unit

#### **Grid 1 – 100 Acres**

**Index interval** I: The Final Grid Index of 120 is above the Trigger Grid Index of 85.

No indemnity is due.

Grid 2 – 50 Acres

**Index Interval** I: The Final Grid Index of 110 is above the Trigger Grid Index of 85.

No indemnity is due.

**Index Interval** II: The Final Grid Index of 90 is above the Trigger Grid Index of 85.

No indemnity is due.

**Index Interval** IV: The Final Grid Index of 70 is below the Trigger Grid Index of 85.

The indemnity is calculated as follows:

**Payment calculation factor** = (85-70)

85

.176

**Indemnity payment** = .176 x \$360

= \$63

**Grid 3 – 100 Acres** 

**Index Interval** I: The Final Grid Index of 110 is above the Trigger Grid Index of 85.

No indemnity is due.

**Index Interval** IV: The Final Grid Index of 60 is below the Trigger Grid Index of 85.

The indemnity is calculated as follows:

**Payment calculation factor** = (85-60)

85

.294

Indemnity payment =  $.294 \times $450$ 

= \$132

**Grid 4 – 245 Acres** 

**Index Interval** I: The Final Grid Index of 120 is above the Trigger Grid Index of 85.

No indemnity is due.

**Index Interval** II: The Final Grid Index of 70 is below the Trigger Grid Index of 85.

The indemnity is calculated as follows:

**Payment calculation factor** = 
$$\frac{(85-70)}{85}$$

= .176

Indemnity payment = .176 x \$1,323

**\$233** 

**Index Interval** III: The Final Grid Index of 60 is below the Trigger Grid Index of 85. The indemnity is calculated as follows:

**Payment calculation factor** = (85-60)

85

= .294

**Indemnity payment** = .294 x \$882

= \$259

A total indemnity of \$687 will be due to Joe Rancher, for this County, for this crop year.

## **Appendix A: Pasture Rangeland Forage**

This appendix, along with the Vegetation Index (VI) Crop Insurance Standards Handbook, Basic Provisions, PRF Crop Provisions (VI-PRF) and Special Provisions provides information for those involved with the VI plan of insurance. Because of the broad scope of information covered by this handbook the information provided in this Appendix provides additional clarification and requirements specific to the VI-PRF plan of insurance. The information provided in this Appendix does not affect the construction or meaning of any of the policy provisions.

## 1. SPECIAL INSTRUCTIONS

#### In addition to standards provided in Section 2 of this handbook:

VI-PRF Definitions:

- **Dollar amount of protection per acre** The county base value per acre, specified in the actuarial documents for each county, crop, type, and practice is determined by multiplying the selected coverage level by the selected productivity factor. The insured will only have one dollar amount of protection per acre for each crop and type.
- Index interval A period of time during which NDVI data is collected that is used to calculate the expected grid index and final grid index, which is designated as a practice on the Special Provisions. The insured may select more than one practice (index interval) during the crop year for each type, share, and grid ID.
- **Insured acres** –Insured acres do NOT have to equal the insured's insurable acres. The insured may select the number of acres to be insured. However, the amount of insured acreage in the county cannot exceed 100 percent of the insured's insurable acres in the county.
- Practice –Periods of time labeled as index intervals and are contained in the Special Provisions. The insured cannot select a separate coverage level or dollar amount of protection per acre for each practice (index interval) for VI-PRF
- **Types** Grazingland and hayland.
- Unit The insured acres within or assigned to a grid ID for each crop, type, practice, and share, in the county.

OCTOBER 2008 47 FCIC-18140 (VI)

The following provides clarification related to what a VI-PRF insured can select as it relates to crop, type, practice, etc. and how they are reported, for insurance, insurability, coverage, etc.:

- The insured will have only one dollar amount of protection per acre for each type, while the amount of premium and indemnity will be calculated separately for each unit.
- The insured is not required to insure all of the insurable acres in the county under the PRF policy. The number of insured acres in the county is selected by the insured.
- The dollar amount of protection per acre is equal to the selected county base value per acre multiplied by the selected coverage level (70% 90%) and the selected productivity factor (60% 150%) specified in the county actuarial documents for the type.
- The insured will have only one dollar amount of protection per acre for each crop, and type, provided in the actuarial documents for the county.
- The insured's policy protection for each unit is equal to the dollar amount of protection per acre multiplied by the insured acres multiplied by the share as shown on the Summary of Coverage.
- Separate points of reference must be established for each type in a grid.
- CAT is not available under the VI-PRF plan of insurance, and any reference to CAT in the VI Crop Insurance Standards Handbook is not applicable.

# 2. INSURANCE CONTRACT INFORMATION

## A. INSURABILITY

#### In addition to standards provided in Section 3C(5) of this handbook:

More than one PRF type is available in a county. Because more than one type is available in a county, and the Crop Provisions allows, the applicant may choose to insure grazingland, hayland, or both.

However, grazingland and hayland cannot both be insured on the same acreage. If the insured acres are intended to be utilized as both grazingland and hayland, and meet the requirements of both types, the insured must choose one type to report and insure the acreage. The insured may choose to change the type in subsequent crop years, as long as the acreage continues to meet the requirements of the type selected.

OCTOBER 2008 48 FCIC-18140 (VI)

## B. YIELD HISTORY AND PRODUCTION RECORDS

In addition to the standards provided in Section 3E(1) of this handbook:

Insureds are NOT required to report yield history or maintain production records.

## 3. UNDERWRITING

## A. GENERAL APPLICATION REQUIREMENTS

In addition to the standards provided in Section 4 B (7) of this handbook:

**Insured Acres:** The insured acres do NOT have to equal your insurable acres.

The applicant may designate a specific percentage of the insured acres to more than one practice listed in the Special Provisions for each grid ID, type, and share. The sum of all the insured acres per unit must equal 100% of the insured acres for each grid ID by type and share.

The minimum percentage of insured acres allowed in any one practice, by grid ID, type and share, is further defined in the Special Provisions.

## B. ACREAGE REPORT FORM REQUIREMENTS

In addition to the standards provided in Section 4E(6) of this handbook:

**Unit Number**: The insured acres within or assigned to a grid ID for each type, practice, and share accounts for a unit.

For example, a policyholder chooses to insure non-contiguous acreage of grazingland and hayland that happens to lie in a single grid ID. The policyholder selects two practices per type and has a 100 percent share. The unit structure will be:

- Unit **00100**, Grazingland, Practice = Index Interval II
- Unit **00200**, Grazingland, Practice = Index Interval III
- Unit **00100**, Hayland, Practice = Index Interval II
- Unit **00200**, Hayland, Practice = Index Interval III

OCTOBER 2008 49 FCIC-18140 (VI)

## C. ACREAGE REPORT REVIEW CRITERIA

## In addition to the standards provided in Section 4G(1) of this handbook:

Total acres of the type versus insurable and insured acres in the county: Proof of total acres in the county can be established by the insured by providing documentation of acreage measured by FSA or an independent third party (which could include but not limited to, an approved measuring service, land surveys, other federal government agencies, legal land deed, or tax document, which provides a detailed measurement of acreage). It is the insured's responsibility to provide acceptable documentation of PRF acreage for a review. Documentation must specify and distinguish the acreage for the insured type from other crop acreage.

### In addition to the standards provided in Section 4G(2) of this handbook:

Insureds will be able to prove shares by providing acceptable verifiable and written documentation. Acceptable verifiable proof of lease/share agreements that an insured can utilize include, but not limited to, hand written documents (with signatures), invoices, etc. Verbal agreements are NOT acceptable verifiable documentation. Written documentation must include legal descriptions or a method to clearly identify the location of the lease.

OCTOBER 2008 50 FCIC-18140 (VI)

## **Appendix B: Apiculture**

This appendix, along with the Vegetation Index (VI) Crop Insurance Standards Handbook, Basic Provisions, API Crop Provisions (VI-API) and Special Provisions, provides information for those involved with the VI plan of insurance. Because of the broad scope of information covered by this handbook, the information provided in this Appendix provides additional clarification and requirements specific to the VI-API plan of insurance. The information in this Appendix does not affect the construction or meaning of any of the policy provisions.

As previously stated, for ease in the administration of the terms of this policy and to avoid the duplication of documents, as used throughout the Basic Provisions and applicable handbooks and directives, the term "acre" is replaced by "colony;" "acres" and "acreage" is replaced by "colonies;" "acreage report" is replaced by "colony report;" and "acreage reporting date" is replaced by "colony reporting date."

## 1. SPECIAL INSTRUCTIONS

### In addition to standards provided in Section 2 of this handbook:

#### VI-API Definitions:

- **Dollar amount of protection per colony** The county base value per colony, specified in the actuarial documents for each county, crop, type, and practice is determined by multiplying the selected coverage level, by the selected productivity factor. The insured will only have one dollar amount of protection per colony for the county.
- Index interval A period of time during which NDVI data is collected that is used to calculate the expected grid index and final grid index, which is designated as a practice on the Special Provisions. The insured may select more than one practice (index interval) during the crop year for each share and grid ID.
- **Insured colonies** Insured colonies do NOT have to equal insurable colonies for the insured. The insured may select the number of colonies to be insured. However, the amount of insured colonies in the county will not exceed 100 percent of the insured's insurable colonies in the county.
- Locations The physical point of residence of hives on a tract of land or acreage.
- Practice Periods of time labeled as index intervals and are contained in the Special Provisions. The insured cannot select a separate coverage level or dollar amount of protection per colony for each practice (index interval) for the VI-API.
- **Types** There are no types available.

• **Unit** – The insured colonies within or assigned to a grid ID, by share and practice in the county.

The following provides clarification related to what an insured can select as it relates to crop, practice, etc. and how they are reported, for insurance, insurability, coverage, etc.:

- The insured will have only one dollar amount of protection per colony, while the amount of premium, and indemnity will be calculated separately for each unit.
- The insured is not required to insure all of the insurable colonies in the county under the API policy. The insured colonies in the county are the number of colonies selected by the insured to be insured.
- The dollar amount of protection per colony is equal to the selected county base value per colony multiplied by the selected coverage level (70% 90%) and the selected productivity factor (60% 150%) specified in the county actuarial documents for the crop.
- The insured will have only one dollar amount of protection per colony for the crop.
- The insured's policy protection for each unit is equal to the dollar amount of protection per colony multiplied by the insured colonies multiplied by the share as shown on the Summary of Coverage.
- CAT is not available under the VI-API plan of insurance. Any reference in the VI Crop Insurance Standards Handbook to CAT is not applicable.

## 2. INSURANCE CONTRACT INFORMATION

## A. <u>INSURABILITY</u>

#### In addition to standards provided in Section 3C(5) of this handbook:

There are no additional types available for the VI-API plan of insurance.

The same colonies cannot be insured in any other county, state, grid, or plan of insurance in the United States.

## B. YIELD HISTORY AND PRODUCTION RECORDS

### In addition to the standards provided in Section 3E(1) of this handbook:

(1) Insureds are NOT required to report yield history or maintain production records for the VI-API policy.

## A. GENERAL APPLICATION REQUIREMENTS

#### In addition to the standards provided in Section 4B(4) of this handbook:

**Eligible County:** County as defined in the Crop Provisions, also includes any acreage, which contains locations occupied by insurable colonies contained within a grid ID that crosses an adjoining county line where the acreage and colonies are contiguous. In this definition, colonies shall not be substituted for acreage.

#### In addition to the standards provided in Section 4B(7) of this handbook:

**Insured Colonies:** As provided in the VI-API Crop Provisions, the insured colonies do NOT have to equal the insurable colonies.

The applicant may designate a specific percentage of the insured colonies to more than one practice listed in the Special Provisions for each grid ID and share. The sum of all the insured colonies per unit must equal 100% of the insured colonies for each grid ID by share.

The minimum percentage of insured colonies allowed in any one practice, by grid ID, and share, is further defined in the Special Provisions.

#### In addition to the standards provided in Section 4 B (7) (c) of this handbook:

The insured must certify that the selected practices support the vegetation production necessary to support the insured crop.

## B. GENERAL COLONY REPORTING REQUIREMENTS

#### In addition to the standards provided in Section 4 D of this handbook:

United States Colonies: The insured must report ALL colonies in which they have a share in the United States. This number must be reported on all colony report forms for the insured regardless of state, county, or plan of insurance. As provided in section 4 E, an AIP may utilize unused columns of their acreage report form to accommodate the required entry.

OCTOBER 2008 53 FCIC-18140 (VI)

## C. ACREAGE REPORT FORM REQUIREMENTS

#### In addition to the standards provided in Section 4E(1) of this handbook:

Insurable Colonies: The insured must possess written documentation, <u>at the time of application</u>, documentation of insurability of the colonies for all counties selected for insurance. Documentation may include, but is not limited to, history of locating colonies in the county, land ownership in the county in which colonies are located, a lease agreement allowing the placement of colonies on acreage, etc.

### In addition to the standards provided in Section 4E (6) of this handbook:

**Unit Number:** The insured colonies within or assigned to a grid ID for each crop and share accounts for a unit. For example:

- Unit **00100**, Apiculture, share 100%, Practice = Index Interval II
- Unit **00200**, Apiculture, share 100%, Practice = Index Interval III
- Unit **00300**, Apiculture, share 50%, Practice = Index Interval II
- Unit **00400**, Apiculture, share 50%, Practice = Index Interval III

There is no basic unit discount and optional units are not applicable.

## D. ACREAGE REPORT REVIEW CRITERIA

## In addition to the standards provided in Section 4G(1) of this handbook:

Total colonies versus insurable and insured colonies in the county: In addition to total, insurable, and insured colonies in the county, the review should confirm that all colonies in the United States in which the insured has a share were also reported. Proof of actual colonies and their insurability is the responsibility of the insured and can be established by maintaining and providing documentation of colony numbers in the county and United States. Acceptable types of colony documentation the insured can use may include, but are not limited to; FSA or other federal or state governmental reporting systems/requirements, tax records, transportation invoices, purchase agreements, bill of sales, legal deeds, etc.

The insured must possess, at the time of application, acceptable verifiable written documentation of insurability of the colonies in the county, for all counties selected for insurance. Documentation may include, but is not limited to, history of locating colonies in the county, land ownership in the county in which colonies are located, a lease agreement allowing the placement of colonies on acreage, handwritten documents/statement (with signatures), etc. Verbal agreements are not acceptable verifiable documentation.

## In addition to the standards provided in Section 4G(2) of this handbook:

The insured will be able to prove shares by providing acceptable verifiable and written documentation. Acceptable verifiable proof of lease/share agreements that an insured can utilize include, but are not limited to, hand written documents (with signatures), invoices, etc. Verbal agreements are NOT acceptable verifiable documentation.

OCTOBER 2008 55 FCIC-18140 (VI)

## **Appendix C: FSA Decisions on NAP and Other Programs**

## 1. NAP COVERAGE AND VI-PRF

#### A. BACKGROUND

Section 196(a)(2)(A) of the 1996 Act provides that commercial crops or other agricultural commodities, except livestock, that is produced for food or fiber for which CAT coverage is **not** available through RMA shall be an eligible crop under the NAP. NAP currently provides benefits for forage crop losses. Therefore, NAP will continue to be available to producers in those counties covered by the Pilot PRF programs.

# B. REQUIREMENTS WHEN A PRODUCER REQUESTS VI-PRF AND OBTAINS NAP COVERAGE

Producers are required to make the election between obtaining NAP coverage or a VI-PRF policy by the sales closing date for the VI-PRF. Purchasing a VI-PRF policy is considered an election by the producer as provided under Section 196(h)(3) of the 1996 Act.

**Note**: Producers could obtain NAP coverage on forage acreage intended for grazing and a VI-PRF policy on forage acreage intended for mechanically harvested forage, or vice versa, because they are considered separate crop types by RMA, and separate crops under FSA's NAP program.

<b>Action</b>				
If the producer has	Then the producer			
Purchased, or intends to purchase, a VI-PRF policy for any of the grazing acres	<ul> <li>is <b>not</b> eligible to participate in NAP on any of the forage acreage intended for grazing</li> </ul>			
for any interval and grid in the NAP unit	<ul> <li>may obtain NAP coverage on his forage acreage intended for mechanically harvested forage, provided he/she will not obtain a VI- PRF policy on such acres.</li> </ul>			
not purchased a RMA VI- PRF policy for any of the grazing acres for any interval and grid in the NAP unit	<ul> <li>may obtain NAP coverage on his forage acreage intended for grazing provided he will not obtain a RMA VI-PRF policy on such acres</li> </ul>			
	<ul> <li>will be ineligible for NAP benefits if he does obtain a RMA VI-PRF policy on any of his forage acreage in the unit intended for grazing</li> </ul>			
	<ul> <li>may obtain NAP coverage on his forage acreage intended for mechanically harvested forage, provided he/she will not obtain a RMA VI-PRF policy on such acres.</li> </ul>			

## 2. RESERVED FOR DISASTER PROGRAM INFORMATION.

OCTOBER 2008 57 FCIC-18140 (VI)